



INTELLECTUAL PROPERTY LAW  
PATENTS, TRADEMARKS,  
COPYRIGHTS, UNFAIR  
COMPETITION, TRADE SECRETS,  
LITIGATION, DISPUTE RESOLUTION  
AND RELATED MATTERS

SALT LAKE AREA OFFICE  
8180 SOUTH 700 EAST, SUITE 200  
SANDY, UTAH 84070-0562  
801.566.6633  
801.566.0750 FAX  
PATLAW@TNW.COM  
WWW.TNW.COM

U.S. MAILING ADDRESS  
P.O. Box 1219  
SANDY, UTAH 84091-1219

LAS VEGAS AREA OFFICE  
OF COUNSEL: NEIL J. BELLER †  
7408 WEST SAHARA  
LAS VEGAS, NEVADA 89117  
702.368.7767  
† ADMITTED IN NEVADA

VAUGHN W. NORTH  
M. WAYNE WESTERN  
GARRON M. HOBSON  
PETER M. DE JONGE  
CLIFTON W. THOMPSON  
STEVE M. PERRY  
WEILI CHÉNG, PH.D.  
DAVID R. MCKINNEY, PE.  
GARY P. OAKESON  
DAVID W. OSBORNE  
DAVID L. STOTT  
JASON R. JONES  
ERIK S. ERICKSEN, M.S.  
JOHN W. L. OGILVIE  
ALEX HAYMOND, B.S. EE  
NATHAN S. WINESETT  
ATTORNEYS

TODD B. ALDER, PH.D.  
JONATHAN M. BENNS, PH.D.  
PATENT AGENTS

AARON M. SMITH, B.S. EE  
WILLIAM T. RALSTON, PH.D. EE  
TECHNICAL CONSULTANTS  
CALVIN E. THORPE  
(1938-1999)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

### TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Re: U.S. Patent Application No. 10/791,300, Filed 3/1/04  
Inventor(s): Chien-Min Sung  
**HIGH PRESSURE SUPERABRASIVE PARTICLE SYNTHESIS**  
Attorney Docket No. 22268

Dear Sir/Madam:

Transmitted herewith for filing and pursuant to 37 C.F.R. §§ 1.56 and 1.97 is an Information Disclosure Statement.

Enclosed also are the following designated documents, as required under 37 C.F.R. §§ 1.97 and 1.98:

- Form PTO-1449 list of 18 reference(s) submitted for consideration.
- Legible copies of all the listed references or their relevant portions.
- Legible copies of the listed non-patent documents and foreign documents or their relevant portions are included.
- Copies of U.S. patents and/or publications are not included pursuant to the Official Gazette Notice, dated Aug. 5, 2003, waiving the requirement of 37 C.F.R. 1.98(a)(2)(i).

All English translations of each non-English reference, if any, within the possession, custody, control or availability of anyone designated in 37 C.F.R. § 1.56(c) (see 37 C.F.R. § 1.98(c)).

The following are included within the Information Disclosure Statement if applicable and as required under 37 C.F.R. § 1.98:

Concise explanation of relevance of each reference not in English and unaccompanied by an English translation.

Statement that certain listed references not enclosed are substantially cumulative of an enclosed reference.

Statement that certain listed references not enclosed were previously cited by or submitted to the Office in the identified prior application which is relied upon for an earlier filing date under 35 U.S.C. § 120.

In order to secure consideration of the items designated above, one or more of the following, if required, is also enclosed:

Statement under 37 C.F.R. § 1.97(e)(1) or (2).

Check No. \_\_\_\_\_ in the amount of \$180.00 constituting the submission fee set forth in 37 C.F.R. § 1.17(p).

In the event that 37 C.F.R. § 1.97(c) applies and the Examiner is not satisfied that the Statement meets the requirements of 37 C.F.R. § 1.97(e), or in any other event remediable by a fee, please credit any over payment or charge any additional fees to Deposit Account No. 20-0100 of the undersigned.

Dated this 3<sup>rd</sup> day of June, 2004.

Respectfully submitted,

*M. Wayne Western*

M. Wayne Western  
Attorney for Applicant  
Registration No. 22,788

THORPE NORTH & WESTERN, LLP  
Customer No. 20,551  
P.O. Box 1219  
Sandy, Utah 84091-1219  
Telephone: (801) 566-6633

*PD*  
*SC*  
MWW/ESE/em  
Enclosures



PATENT APPLICATION  
Attorney Docket No.: 22268

IN THE UNITED STATES PATENT & TRADEMARKS OFFICE

APPLICANT: Chien-Min Sung  
SERIAL NO.: 10/791,300  
FILED: 3/1/04  
FOR: HIGH PRESSURE SUPERABRASIVE  
PARTICLE SYNTHESIS  
ATTORNEY DOCKET NO. 22268

INFORMATION DISCLOSURE  
STATEMENT UNDER  
37 C.F.R. § 1.97

CERTIFICATE OF MAILING  
UNDER 37 C.F.R. § 1.8

DATE OF DEPOSIT: 6/3/04

I hereby certify that this paper or fee (along with any paper or fee referred to as being attached or enclosed) is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated above and is addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

  
Emily Mecham

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir/Madam:

Please find, pursuant to 37 C.F.R. § 1.98(a)(1), the enclosed Form PTO-1449 which contains a list of all patents, publications, or other items that have come to the attention of one or more of the individuals designated in 37 C.F.R. § 1.56(c). Applicant respectfully submits that this Information Disclosure Statement is filed pursuant to:

37 C.F.R. § 1.97 (b)(1) or (3), within three months of the filing date of the application, or before a first office action on the merits, whichever occurs last;

37 C.F.R. § 1.97 (c), after a first office action on the merits, but before a Final Office Action or a Notice of Allowance, whichever occurs first, and is accompanied by either 1) a statement in accordance with 37 C.F.R. § 1.97(e), or 2) the fee set forth in § 1.17(p); or

37 C.F.R. § 1.97 (d), after a Final Office Action or Notice of Allowance, whichever occurs first, but on or before payment of the issue fee, and is accompanied by both 1) a statement in accordance with 37 C.F.R. § 1.97(e), and 2) the fee set forth in § 1.17(p).

While no representation is made that any of these references may be "prior art" within the meaning of that term in accordance with 35 U.S.C. §§ 102 or 103, the enclosed list of references is disclosed so as to comply with the duty of disclosure set forth in 37 C.F.R. § 1.56.

Information Disclosure Statement  
Commissioner for Patents  
Page 2

Moreover, while no representation is made that a specific search of office files or patent office records has been conducted or that no better art exists, the undersigned attorney of record believes that the references listed, together with any other references which may have been previously submitted or listed, are the closest to the claimed invention (taken in its entirety) of which the undersigned is presently aware, and no art which is closer to the claimed invention (taken in its entirety) has been knowingly withheld.

In accordance with 37 C.F.R. §§ 1.97 and 1.98, a copy of each listed reference (or relevant portion thereof) which was not previously submitted to, or cited by, the Patent Office is also enclosed.

Legible copies of any listed non-patent literature and foreign documents or their relevant portions. Copies of U.S. patents and/or publications are NOT included pursuant to the Official Gazette Notice, dated Aug. 5, 2003, waiving the requirement of 37 C.F.R. 1.98(a)(2)(i).

The references listed in the accompanying Form PTO-1449 are NOT enclosed because, under 37 C.F.R. § 1.98(d), they were previously cited by or submitted to the Office in application number \_\_\_\_\_, which is relied upon for an earlier filing date under 35 U.S.C. § 120.

For all listed references that are not either in the English language, or accompanied by a translation into English, a concise explanation of relevance as required under 37 C.F.R. § 1.98(a)(3) is enclosed attached to each.

Please charge any additional fees or credit any overpayment to Deposit Account No. 20-0100.

Dated this 3<sup>rd</sup> day of June, 2004.

Respectfully submitted,

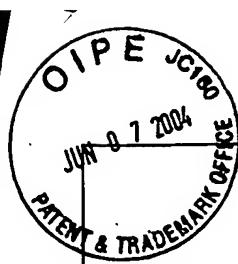


M. Wayne Western  
Attorney for Applicant  
Registration No. 22,788

THORPE NORTH & WESTERN, LLP  
Customer No. 20,551  
P.O. Box 1219  
Sandy, Utah 84091-1219  
Telephone: (801) 566-6633



MWW/ESE/em



PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 22268	SERIAL NO. 10/791,300
LIST OF PRIOR ART CITED BY APPLICANT		APPLICANT Chien-Min Sung		
		FILING DATE 3/1/04		GROUP

## U.S. PATENT DOCUMENTS

EXAMINER INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
A1	2,876,086	Mar., 1959	A.E. Raymond			
A2	4,273,561	Jun. 1981	Fernandez-Moran Villalobos			
A3	4,547,257	Oct., 1985	Iizuka et al.			
A4	4,610,699	Sep., 1986	Yazu et al.			
A5	4,680,199	Jul. 1987	Vontell et al.			
A6	4,925,457	May 1990	deKok et al.			
A7	5,049,165	Sep., 1991	Tselesin			
A8	5,194,070	Mar., 1993	Sumiya et al.			
A9	5,273,730	Dec., 1993	Yoshida et al.			
A10	5,380,390	Jan., 1995	Tselesin			
A11	5,443,032	Aug., 1995	Vichr et al			
A12	5,980,982	Nov., 1999	Degawa et al.			
A13	6,159,286	Dec., 2000	Sung			
A14	6,286,498	Sep., 2001	Sung			
A15	6,616,725	Sep., 2003	Cho et al.			
A16	6,627,168	Sep., 2003	Ohtsubo et al.			

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIALS	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
A17	WO98/45092	Mar., 1998	PCT			

## OTHER PRIOR ART (Including Author, Title, Pertinent Pages, Etc.)

A18	Sung, James C., "The Eastern Wind of Diamond Synthesis," NEW DIAMOND AND FRONTIER CARBON TECHNOLOGY, Vol. 13 No. 12003		
-----	--	--	--

EXAMINER	DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication with applicant.